

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A metal ion eluting unit, comprising:

a plurality of electrodes;

a drive circuit that applies a voltage between the electrodes, such that the metal ion eluting unit elutes metal ions from one of the electrodes serving as a positive electrode by applying the voltage between the electrodes; and

a control circuit that controls the drive circuit so that the drive circuit periodically reverses a polarity of the voltage applied between the electrodes,

wherein the control unit includes a counter that counts a first predetermined period and a second predetermined period, and is configured to, in a period from one voltage polarity reversal to a next voltage polarity reversal, operate the drive circuit, from when the polarity of the voltage applied between the electrode is reversed until the first predetermined a predetermined period elapses, in a first current mode in which a value of a current flowing between the electrodes equals a first value, and operates the drive circuit thereafter in a second current mode until the second predetermined period elapses in which a value of the current flowing between the electrodes equals a second current value smaller than the first current value.

2. (Currently Amended) The metal ion eluting unit according to claim 1,

wherein the first predetermined period ~~a period of the first current mode~~ is shorter than the second predetermined period ~~a period of the second current mode~~.

3. (Currently Amended) The metal ion eluting unit according to claim 1,
wherein the drive circuit performs constant-voltage driving during the first predetermined
~~period of the first current mode and~~ constant-current driving during the second predetermined
~~period of the second current mode.~~

4. (Previously Presented) The metal ion eluting unit according to claim 1,
wherein the polarity of the voltage applied between the electrodes is periodically reversed
with a voltage application rest time inserted during every reversal.

5. (Previously Presented) The metal ion eluting unit according to claim 1,
wherein transfer from the first current mode to the second current mode occurs with a
voltage application rest time inserted therebetween.

6. (Previously Presented) The metal ion eluting unit according to claim 4,
wherein a short-circuit is made between the electrodes during the voltage application rest
time.

7. (Original) The metal ion eluting unit according to claim 5,
wherein a short-circuit is made between the electrodes during the voltage application rest
time.

8. (Previously Presented) The metal ion eluting unit according to claim 1, further
comprising:

a water quality detection portion which detects water quality of water existing between the electrodes,

wherein the control circuit is configured to change at least one of the first current value and the second current value in accordance with the water quality detected by the water quality detection portion.

9. (Currently Amended) The metal ion eluting unit according to claim 1, further comprising:

a water quality detection ~~water detection~~ portion which detects water quality of water mediating between the electrodes,

wherein the control circuit is configured to change at least one of a time ratio of the first predetermined period to the second predetermined period ~~a period of the first current mode to a period of the second current mode~~ and a polarity reversal period of the voltage applied between the electrodes in accordance with the water quality detected by the water quality detection portion.

10. (Previously Presented) The metal ion eluting unit according to claim 8, wherein the water quality detection portion detects at least one of water hardness, water electric conductivity, and water chloride ion concentration.

11. (Previously Presented) The metal ion eluting unit according to claim 9, wherein the water quality detection portion detects at least one of water hardness, water electric conductivity, and water chloride ion concentration.

12. (Previously Presented) The metal ion eluting unit according to claim 8,
wherein the water detection portion detects the water quality by detecting at least one of
the voltage between the electrodes and the current flowing between the electrodes.
13. (Original) The metal ion eluting unit according to claim 9,
wherein the water detection portion detects the water quality by detecting at least one of
the voltage between the electrodes and the current flowing between the electrodes.
14. (Previously Presented) The metal ion eluting unit according to claim 1,
wherein part or all of the metal ions eluted are any of silver ions, copper ions, and zinc
ions.
15. (Previously Presented) An apparatus, comprising:
the metal ion eluting unit according to claim 1.
16. (Previously Presented) The apparatus according to claim 15,
wherein the apparatus is a washing machine.
17. (Canceled)